

Patents Recently Issued to IBM Inventors

May and June 1971

May 1971

3,576,941	Flat Power-distribution Cable	D. F. Colglazier
3,576,969	Solder Reflow Device	R. J. Surty and C. Trollmann
3,576,971	Fluid-actuated Translating Apparatus	R. E. Norwood
3,576,973	Binary Register	W. D. Draper
3,576,978	System for Accommodating Various Machine Tool Resolutions from a Standard Program	J. Rosenberg
3,576,982	Error Tolerant Read-only Storage System	K. A. Duke
3,577,036	Method and Means for Interconnecting Conductors on Different Metaliza- tion Pattern Levels on Monolithically Fabricated Integrated Circuit Chips by Alloying an Interconnection Portion of Each Conductor to Contiguous Portions of One Low Resistivity Region of the Chip	J. J. Curtis and C. E. Ruoff
3,577,037	Diffused Electrical Connector Apparatus and Method of Making Same	A. R. Di Pietro and R. E. Thun
3,577,044	Integrated Semiconductor Devices and Fabrication Methods Therefor	W. J. Armstrong, A. M. Healy and M. C. Duffy
3,577,047	Field Effect Device	G. Cheroff
3,577,076	Automatic Range Scale Selection Apparatus for a Measuring Device	J. E. Frushour, E. H. Millham and J. E. Ortloff
3,577,082	Carrier Frequency Phase-readjustment Device	A. H. Lautier, H. J. Nussbaumer and J. M. Pierret
3,577,089	Data Transmission Time Domain Equalizer	E. Gorog
3,577,127	Composer System for Processing Data in Parallel Columns	D. Bishop, D. W. Terry, J. E. Jones, R. S. Heard and W. H. Davis
3,577,128	Synchronizing Clock System	T. N. Criscimagna and R. J. Fournier
3,577,132	Phase Locked Oscillator for Storage Apparatus	D. E. Anderson, L. M. Koch, R. E. Lloyd and F. J. Sordello
3,577,140	Triple Integrating Ramp Analog-to-digital Converter	H. B. Aasnaes
3,577,185	On-line System for Measuring the Efficiency of Replacement Algorithms ...	L. A. Belady
3,577,189	Apparatus and Method in a Digital Computer for Allowing Improved Pro- gram Branching with Branch Anticipation Reduction of the Number of Branches, and Reduction of Branch Delays	J. Cocke, B. Randell and E. H. Sussenguth
3,577,190	Apparatus in a Digital Computer for Allowing the Skipping of Predeter- mined Instructions in a Sequence of Instructions, in Response to the Occurrence of Certain Conditions	J. Cocke, P. S. Dauber, H. Schorr and E. H. Sussenguth
3,577,191	Magnetic Head Assembly with Sidebar	E. E. Haertlein
3,577,192	Reproduce Head with Peak Sensing Circuit	C. E. Schlaepfer
3,577,278	Article Surface Treating Apparatus and Method	R. L. Rohr
3,577,285	Method for Epitaxially Growing Silicon Carbide onto a Crystalline Sub- strate	R. F. Rutz
3,577,286	Semiconductor Preparation and Deposition Process	M. Berkenblit and A. Reisman
3,577,326	Process for Making a Magnetic Data Storage Element	L. C. Liebschutz
3,577,444	Substituted Anthraquinones	N. J. Clecak and R. J. Cox
3,577,506	Fabrication of Ultra-thin Wall Bobbins	A. B. Brown
3,577,634	Method of Manufacturing a Magnetic Head Assembly	D. R. Secrist
3,578,131	Typewriter with Extended Writing Line	W. A. Heidt, L. E. Palmer and J. O. Schaefer
3,578,133	Nonrepeat Mechanism for Keyboard	J. O. Schaefer
3,578,156	Container for a Reel	C. J. Norby
3,578,337	Reversible Drive for Transducer Used in a Recording and Reproducing Apparatus	W. F. Klein
3,578,511	Solid Metal Molding	D. L. Mehl, D. T. Wilson and R. J. Young
3,578,906	Closed Circuit Television Measurement System	L. W. Holmstrom, J. A. Tuttle and H. J. Young

3,579,185	Method and Apparatus for Checking a Data Transfer Operation
3,579,195	Data System Incorporating Method and Apparatus for Referencing Media Locations
3,579,200	Data Processing System
3,579,213	Magnetic Head Accessing Mechanism Utilizing Spring Bias
3,579,214	Multichannel Magnetic Head with Common Leg
3,579,814	Method for Fabricating a Semiconductor Device Having an Epitaxially Grown Region
3,580,066	Method for Detecting Exposure of a Base Material Through an Overlying Coating
3,580,460	Thermocompression Bonding Apparatus
3,580,732	Method of Growing Single Crystals
3,581,219	System for Dynamically Adjusting Clipping in Editing Electrocardiogram Waves
3,581,286	Module Switching Apparatus with Status Sensing and Dynamic Sharing of Modules

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3,581,375	Method and Apparatus for Manufacturing Integrated Circuits
3,581,860	Method and Apparatus for Shifting a Typing Element
3,582,176	Holographic Optical Method and System for Photoprinting Three-dimensional Patterns on Three-dimensional Objects
3,582,571	Multigap Magnetic Head Having Gaps Disposed at an Angle to Each Other
3,582,758	Rectifier Using Low Saturation Voltage Transistors
3,582,865	Microcircuit Module and Connector
3,582,878	Multiple Random Error Correcting System
3,582,880	Data Error Correction by Inversion Storage
3,582,886	Scanning Address Generator for Computer-controlled Character Reader ..
3,582,892	Sense, Store and Interlock Matrix Circuit for a Switching Device
3,582,895	Alphanumeric Parallel Tone, Sequential Character System, Method and Apparatus
3,582,901	Random Data Acquisition Interface System
3,582,905	Character Generation by Improved Scan, Storage, and Decoding Apparatus
3,582,906	High-speed dc Interlocked Communication System Interface
3,582,917	Magnetic Head Having a Continuously Variable Radius of Curvature
3,582,947	Integrating Ramp Analog to Digital Converter
3,582,962	Hand Entry Position Sensing System
3,583,548	Apparatus for Handling Miniature Articles
3,583,685	Method and Apparatus for Controlling Quantity of a Vapor in a Gas
3,583,699	Card Feeding Mechanism and Feed Knife Therefor
3,583,709	Scanning Head Direction Memory Device for Recording and Reproducing Apparatus
3,583,752	Vibratory Article Handling Device
3,583,783	Bookcase
3,583,918	Lithium Copper Manganese Ferrite Storage Core Material
3,584,162	Electrical Keyboard Switch Mechanism with Improved Resilient Diaphragm Contact Actuator
3,584,269	Diffused Equal Impedance Interconnections for Integrated Circuits
3,584,284	Digital Position Measurement and Control System
3,584,362	Apparatus for Wiring Ferrite Core Matrices
3,584,375	Process for Manufacturing a Magnetic Sound Head Core
3,584,741	Batch Sorting Apparatus
3,584,933	Light Deflection Apparatus
3,585,087	Method of Preparing Green-emitting Gallium Phosphide Diodes by Epitaxial Solution Growth
3,585,088	Methods of Producing Single Crystals on Supporting Substrates
3,585,296	Synchronized Reciprocating Lens Photocomposer

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3,585,298	Timing Recovery Circuit with Two Speed Phase Correction	<i>R. A. Liberman</i>
3,585,377	Fail-safe Decoder Circuits	<i>D. C. Jessep, Jr.</i>
3,585,378	Error Detection Scheme for Memories	<i>W. G. Bouricius and K. A. Duke</i>
3,585,443	Three-dimensional Gas Panel	<i>G. M. Krembs</i>
3,585,464	Semiconductor Device Fabrication Utilizing (100) Oriented Substrate Material	<i>P. P. Castrucci, M. S. Hess, G. Maheras, W. D. North and E. G. Grochowski</i>
3,585,500	Dynamic Time/Voltage Test System	<i>S. J. Grubel</i>
3,585,510	Threshold Circuit Apparatus Having Stabilized Input Level	<i>F. L. O'Malley</i>
3,585,588	Supplementary Scan Lexical Symbol Identifier	<i>W. W. Hardin, P. J. Hurley, P. J. Traglia and R. J. Norman</i>
3,585,599	Universal System Service Adapter	<i>D. C. Hitt and R. J. Woessner</i>
3,585,605	Associative Memory Data Processor	<i>P. A. E. Gardner, M. H. Hallett, R. J. Llewelyn and P. J. Titman</i>
3,585,606	File Protect Circuit and Method	<i>J. R. Evans and J. W. Roossien</i>
3,585,613	Field Effect Transistor Capacitor Storage Cell	<i>T. L. Palfi</i>
3,585,616	Information Storage Element	<i>N. J. Mazzeo</i>
3,585,927	Pivotaly Mounted High Performance Print Magnet	<i>R. C. Burns, J. E. Drejza, D. F. Manning, R. L. Stark, D. J. Stiles, J. E. Wallace and J. T. Wilson, III</i>
3,586,101	Cooling System for Data Processing Equipment	<i>R. C. Chu, O. R. Gupta, U.-P. Hwang, K. P. Moran and R. E. Simons</i>
3,586,450	Failsafe System for Copying Machine	<i>R. E. Hosey, T. A. Hoskins, M. F. Shlatz and J. W. Stanley</i>
3,586,554	Process for Increasing Photoresist Adhesion to a Semiconductor by Treating the Semiconductor with a Disilylamide	<i>R. A. Couture, R. T. Gleason and J. J. Lajza, Jr.</i>
3,586,772	Second-order Video Clipper for Optical Character Reader	<i>W. W. Hardin</i>
3,586,883	High Voltage MOSFET Analog Switching Circuit with Floating Drive ...	<i>R. A. Hayes</i>
3,586,899	Apparatus Using Smith-Purcell Effect for Frequency Modulation and Beam Deflection	<i>H. Fleisher</i>
3,587,028	Coaxial Connector Guide and Grounding Structure	<i>E. C. Uberbacher</i>
3,587,031	Electrical Connector Housing with Means Producing Contact Wipe	<i>T. F. Flavin, J. B. Harris and J. R. Mankus</i>
3,587,044	Digital Communication System	<i>H. E. Jenkins</i>
3,587,047	Selective Character Centering Line Follow Logics	<i>A. Cutaia</i>
3,587,073	Clamp for Attaching Magnetic Disks to a Hub	<i>S. Ghose and A. Kluth</i>
3,588,119	Dictating and Transcribing Apparatus with Rapid Transcriber Alignment and Movement Facilities	<i>J. Cater, F. W. Johnson and B. F. Wehmer</i>
3,588,176	Article Transport System and Method	<i>E. S. Mathisen</i>
3,588,228	Variable Reduction Lens System	<i>J. S. Wilczynski and R. E. Tibbetts</i>
3,588,242	Drum Structure for a Xerographic Copying Machine	<i>R. A. Berlier and R. W. Rice</i>
3,588,345	Position Transducer Using a Sweeping Field Null	<i>H. Dym</i>
3,588,380	Switching Parameters for Recording/Playback or Magnetic Media Having Different Coercivity and/or Retentivity Characteristics	<i>F. J. Horlander and W. R. Yount</i>
3,588,408	Pulse Switching Apparatus	<i>W. F. Beausoleil and E. C. Uberbacher</i>
3,588,430	Fabrication of Complex Electrodes by Photoetching for Electrical Discharge Machining Apparatus	<i>A. Appel and E. J. Taschler</i>
3,588,451	Mark Read Apparatus Using Small Raster	<i>P. E. Nelson</i>
3,588,508	Laser Infrared Image Converter	<i>H. Wieder</i>
3,588,528	A Four Phase Diode-FET Shift Register	<i>L. M. Terman</i>
3,588,556	Low Impedance Transverse Cooling of Electric Motors	<i>A. M. Guzman and P. Y. Hu</i>
3,588,590	Gas Discharge Plasma Tube Having a Multiturn Primary Winding	<i>C. B. Zarowin</i>
3,588,596	Two-color Matrix-type Display Panel	<i>D. D. Tech</i>
3,588,615	Pluggable Module Connector	<i>L. E. Brearly, S. M. Jensen, V. P. Subik and G. L. Williams</i>
3,588,719	Frequency Detector Circuit Utilizing an Electromechanical Tuned Filter	<i>P. Abramson and L. W. Emerson</i>
3,588,736	Three-terminal Bulk Negative Resistance Device Operable in Oscillatory and Bistable Modes	<i>J. C. McGroddy</i>
3,588,785	Connector Assembly	<i>A. T. Hardardt and E. C. Uberbacher</i>
3,588,820	Character Checking Apparatus for Optical Character Generator	<i>R. O. Cobb and J. Lipp</i>
3,588,823	Mutual Information Derived Tree Structure in an Adaptive Pattern Recognition System	<i>C. K. Chow and C. N. Liu</i>
3,588,829	Integrated Memory System with Block Transfer to a Buffer Store	<i>L. J. Boland and G. D. Granito</i>

3,588,830	System for Using a Memory Having Irremediable Bad Bits	<i>W. J. Duda and L. M. Terman</i>
3,588,839	Hierarchical Memory Updating System	<i>L. A. Belady, C. J. Kuehner,</i> <i>M. M. Lehman and B. Randell</i>
3,588,846	Storage Cell with Variable Power Level	<i>R. H. Linton and G. Y. Sonoda</i>
3,588,855	Data Gap Responding Apparatus	<i>R. F. Scully</i>
3,588,990	Manufacturing Technique of Self-punch and Self-clinch Component Assembly	<i>G. F. Klaus and E. H. Persson</i>
3,589,591	Bonding Apparatus	<i>C. W. Schwenn</i>
3,589,704	Holders for Irregularly Formed Integrated Circuit Devices	<i>F. J. Kurtz</i>
3,589,789	Method of Producing an Open Cell Color Plasma Display Device	<i>C. R. Hubert,</i> <i>G. M. Krembs and P. Soltan</i>
3,590,249	Optical Read System	<i>M. E. Rabedeau</i>
3,590,372	Spreading Resistance Method and Apparatus for Determining the Resistivity of a Material	<i>D. P. DeSantis, R. G. Dessauer,</i> <i>E. F. Gorey, M. R. Poponiak,</i> <i>C. P. Schneider and</i> <i>P. A. Schumann</i>